

DUTY STATEMENT

Classification: Associate Toxicologist		Position Number: 811-150-7941-001	
Branch/Section: Air and Site Assessment and Climate Indicators Branch/Air Toxicology and Risk Assessment Section			
Location: Sacramento/Oakland		Effective Date:	
Management Designation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Conflict of Interest	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Supervision Received:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Supervision Exercised:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Pursuant to Government Code Section 3100-3109, all public employees are declared to be disaster service workers for the protection of the health and safety and the preservation of the lives and property of the people of the state from the effects of natural, man-made, or war-caused emergencies. Such emergencies may result in conditions of disaster or extreme peril to life, property, and resources and an appropriate response. This is of paramount importance to the state in protecting its citizens and resources.

POSITION SUMMARY

The Air Toxicology and Risk Assessment Section (ATRAS) in the Air and Site Assessment and Climate Indicators Branch provides health effects assessments of air pollutants. The ATRAS develops health effects assessment for Toxic Air Contaminants, chemicals listed under the Air Toxics Hot Spots Act, and inhaled chemicals of interest or concern to other California public health protective programs; and provides risk assessment guidelines and review risk assessments under the Hot Spots programs. The ATRAS generates risk assessment guidelines and specific assessments of risks to public health from toxic chemicals in air, for use by the California Air Resources Board (CARB) and local Air Pollution Control/Air Quality Management Districts (Air Districts) in their regulatory actions under the Toxic Air Contaminants (Health and Safety Code Section 39660 et seq.) and Air Toxics Hot Spots (Health and Safety Code Section 44300 et seq.) programs. The ATRAS also reviews Air Toxics Hot Spots facility health risk assessments (HRAs) for the Air Districts and reviews alternative fuel human health impacts for the California Environmental Policy Council as part of the Multimedia Fuels Group.

Under direction of the Senior Toxicologist, Chief of the Air Toxicology and Risk Assessment Section, the Associate Toxicologist performs hazard identification, dose response assessment and risk analysis of the toxicity (or lack thereof) of actual or candidate toxic air contaminants (TACs) and substances listed or potentially of concern under the Air Toxics Hot Spots program. The Associate Toxicologist works as a member of a multidisciplinary team of scientists evaluating public health risks, and works under the guidance of a Staff Toxicologist or Senior Toxicologist, where assigned tasks are of average difficulty, and makes decisions independently on routine tasks assigned. The Associate Toxicologist will perform all the following duties, and other related work:

ESSENTIAL FUNCTIONS

- 30% Researches data on the health effects of toxic air contaminants and potential toxic air contaminants from studies in experimental animals, and epidemiological and clinical studies in humans. Evaluate the literature on specified toxic air contaminants to determine which toxic air contaminants (TACs) have the potential to have greater impacts on infants and children than on adults. Review all available information on the pharmacokinetics and toxicity of the specified TACs and providing written analysis of the potential for differential impacts on infants and children. Work with other toxicologists and Public Health Medical Officers in the Section to evaluate the adequacy of risk assessment methodologies to protect infants and children.

(Attach additional sheet if necessary)

I have read and understood the duties and essential functions of the position and can perform these duties with or without reasonable accommodation:	Date:
Employee Signature:	
I certify that the above accurately represent the duties of the position:	Date:
Supervisor Signature:	
PERSONNEL USE ONLY: This personnel transaction has been reviewed and approved by:	
Personnel Analyst Signature:	Date:

- 25% Use quantitative risk assessment methodology for the application of NOAEL (No Observable Adverse Effect Level) or benchmark dose (BMD) methods to the derivation of health-protective Reference Exposure Levels (RELs) for non-cancer endpoints; and application of models such as the linearized multistage model and benchmark dose model for derivation of cancer potency factors. Analyze non-cancer and/or cancer chemical toxicity data to determine if a suitable data set exists for dose-response modeling. Determine if a NOAEL or BMD approach should be used for REL development. Analyze cancer data to determine the correct parameters for cancer dose-response modeling.
- 20% Contribute input to reports for public comment and for review by the state's Scientific Review Panel (SRP) on TACs and substances requiring evaluation under the Air Toxics Hot Spots program, analyzing risks to public health from exposure to specified toxic chemicals, and their potential to differentially impact infants and children. Present report information at public hearings and workshops to fulfill Office's duty to inform public. Prepare responses to public comments on reports for review by supervisor to ensure thoroughness and completeness. Provide input through research and literature review to testimony relating to these reports for the SRP. Draft preliminary responses to SRP comments to ensure that the Panel's input is taken into account.
- 10% Prepare written reviews of Air Toxic Hot Spots facility HRAs for the Air Districts using the methodology contained in the 2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments and the Hotspots Analysis and Reporting Program (HARP). Evaluate data submitted in facility HRAs using HARP and Google Earth software. Determine if facility HRA results agree with OEHHA data analysis.
- 10% Evaluate alternative fuel environmental and human health impact report data and provide written reports and recommendations to the Multimedia Fuels Group on that data. Evaluate alternative fuel Tier reports for adequacy of data and correctness of conclusions, using non-cancer and cancer toxicology principles.

MARGINAL FUNCTIONS

- 5% In collaboration with other OEHHA staff members, contribute to the evaluation of potential health and environmental impacts of proposed alternative fuels and their combustion products. Provide consultation to other sections and branches of OEHHA, other BDOs and other State or local agencies concerning the adverse health effects of air pollutants, pesticides and other substances to which members of the community, including infants and children may be exposed by inhalation. May testify as an expert witness in hearings and court procedures, meetings, and seminars on the health effects of substances considered under the air toxics programs.

REQUIRED QUALIFICATIONS

Experience in general principles of toxicology, with emphasis on public health and environmental concerns. Familiar with testing procedures for toxicological investigations and the principles and procedures of risk assessment. Proficiency in evaluating research studies in the fields of toxicology and pharmacology, especially inhalation toxicology and carcinogenesis, for application to issues of public health. Ability to interpret and apply environmental and public health standards.

DESIRED QUALIFICATIONS

Knowledge of provisions of laws, rules and regulations pertaining to the emission, use of, processing and handling of toxic substances. Ability to work cooperatively with outside agencies and departmental staff.

WORKING CONDITIONS

OEHHA has a hybrid work environment that includes work in an office setting in a high-rise building and telework at home. OEHHA's office is located in a downtown high-rise office building. The air-conditioned accommodation consists of open areas furnished with cubicles, not all of which have direct natural illumination. Extended periods of reading and writing, and frequent use of computer workstations with statistical, bibliographic, communications or word processing software.

Time critical assignments are part of the workload.

Attendance at off-site meetings outside standard office hours is sometimes required.

Availability to occasionally travel statewide and out of State.

May be required to travel to other OEHHA locations for business related needs as necessary.

(Attach additional sheet if necessary)

I have read and understood the duties and essential functions of the position and can perform these duties with or without reasonable accommodation:	Date:
Employee Signature:	
I certify that the above accurately represent the duties of the position:	Date:
Supervisor Signature:	
PERSONNEL USE ONLY: This personnel transaction has been reviewed and approved by:	
Personnel Analyst Signature:	Date: